Commodity Spotlight

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Coffee Exporters Counting on Improved Earnings in 1999/2000

Brazil and other coffee-exporting countries are expecting a smaller 1999/2000 Brazilian crop to draw down world supplies, boost prices, and reverse the 1998/99 downturn in prices and foreign exchange earnings. The value of world coffee exports in 1998/99 is heading down to $11 billion, off 10 percent from 1997/98, after rising to $14 billion in 1996/97 from $6 billion in 1992/93. While export volume is expected to increase in 1998/99, sharply lower prices will reduce the value (*AO* August 1998).

Producers in Central America and Africa, where coffee exports are critical to national economies, have been hard hit by the drop in revenue. The loss in export revenue is particularly threatening when the global economy is on shaky footing, and producers are seeking improvements in coffee productivity, national infrastructure, and world-wide consumption.

The world coffee crop in 1998/99 (July-June) is estimated at 106.8 million bags (60 kg or 132 pounds each), up 9 percent from 1997/98. Brazil accounts for about one-third of world output. Prices for arabica coffee—milder in taste than robusta and the type most widely consumed in the U.S.—have been lower since last summer due to sharply higher 1998/99 production, particularly in Brazil. Prices for robusta varieties—used primarily in soluble coffee, known to consumers as instant—have strengthened because severe drought cut production in Asia. During January-June 1999, world prices for arabica coffees are expected to average 30 percent below a year earlier, more than offsetting an expected 5-percent increase in robusta prices.

These lower prices for green (unroasted) coffee are being passed along to U.S. consumers. U.S. retail prices for roasted coffee fell 20 percent during fall 1998, compared with a year earlier. As large Brazilian supplies continue downward pressure on world prices, U.S. retail prices for roasted coffee are expected to average around $3.50 a pound in January-June 1999, about 10-15 percent below a year earlier. Continued strong robusta prices, however, are expected to keep U.S. instant prices for January-June 1999 at around $10.50 to $10.75 a pound, slightly above a year earlier.

Converting Coffee Beans Into Foreign Exchange

Coffee is one of the world's most highly traded commodities; forecast world exports of 80 million bags in 1998/99 represent 75 percent of world coffee production. Exports represent a much smaller share of global production for other commodities—only 30 percent of sugar, 20 percent of wheat and oilseeds, 10 percent of coarse grains, and 5 percent of rice production is exported. Coffee production is regionally concentrated while demand is worldwide, and in the largest consuming markets—the U.S., Germany, France, and Japan, which together consume half of world exports—coffee production is negligible. Coffee prices, which average $3,000 a ton, put it near the top in terms of total export value, along with soybeans, corn, wine, and cheese.

Coffee consumption is increasing at roughly the rate of population growth worldwide. Emerging markets in Eastern Europe and Russia accounted for much of the recent growth in world coffee demand, however, as total consumption has been flat in the major Northern Hemisphere markets. And while consumption is fairly stable, production varies 5-10 percent annually and market prices fluctuate widely. Average world prices for green coffee slumped to 55 cents a pound in 1991/92, rose to $1.50 in 1994/95, and will likely wind up near $1 in 1998/99.

Across all producers, coffee accounted for a steady 3 percent of export earnings in the 1990's. Coffee accounts for 5 percent of Brazil's export earnings, but for Colombia the share is 20 percent. Coffee also contributes 20-30 percent of total export earnings for the Central American countries of Guatemala, Honduras, Nicaragua, El Salvador, and Costa Rica. African and South American coffee producing countries overall earn 5 percent of their export revenue from coffee. Coffee is less important to Asia overall, but Vietnam's exports have contributed a growing share of its export earnings, rising from 2 percent to nearly 15 percent in the last 6 years.

Large coffee supplies and loss in coffee export revenue in 1998/99 are testing the resolve of the Association of Coffee Producing Countries (ACPC) to maintain export earnings by managing world supplies. The ACPC, formed in 1993, comprises 13 countries and accounts for 75 percent of world coffee exports. ACPC members attempt to mitigate large swings in world coffee prices by agreeing to limit

exports, but the organization has no mechanism to enforce the limits.

The strategy of holding back supplies to raise prices is generally beneficial to producers in a market with fairly inelastic demand, where a curtailment of quantity sold brings a proportionately greater increase in price, which pushes up total revenue. Nevertheless, such cartel-like activity is difficult to maintain, since members may be tempted to increase sales to take advantage of the higher prices, thereby undermining the strategy.

Brazil's export limit for 1998/99 was initially set at 15 million bags, the same as a year earlier. The Brazilian government has offered loans with favorable terms to encourage producers to hold stocks, and prospects for a lower 1999/2000 crop and higher prices are also encouraging growers to refrain from rushing coffee to the market. But even under these circumstances, the mid-January currency devaluation and ensuing financial difficulties are expected to push exports to more than 19 million bags.

Coffee yields vary widely, depending on climate, growing conditions, coffee type, and management skills. On average, an acre yields about 4 bags of coffee, although up to 8-10 bags are attained in some Central American countries. Producers can increase productivity by planting trees with increased cold-hardiness and drought resistance at higher per-acre densities, by irrigating and fertilizing with drip tubes, and by harvesting and processing higher quality, uniformly ripened beans.

An average 4-bag yield earns $400 to $800 an acre, while specialty coffees from Central America earn $1,500 to $3,000 an acre. Coffee grown in Jamaica's famed Blue Mountain region earns up to seven times the world average.

Coffee losses to the vagaries of weather—freezes, droughts, hurricanes—can be devastating to economies dependent on coffee exports. In 1998, Hurricane Georges and Tropical Storm Mitch caused widespread destruction in Central America. Preliminary estimates of losses from these two storms of 750,000-1 million bags equate to around $100 million in value. Coffee was lost directly to rains and high winds, as well as indirectly with the destruction of roads and bridges necessary for access and transportation. The coffee economy will not fully recover until roads in Honduras and Nicaragua are rebuilt, which will take several years.

Brazil Is the World's Largest Coffee Producer

	1993/94	94/95	95/96	96/97	97/98	98/99
			Million bags			
Brazil	28.5	28.0	16.8	28.0	23.5	35.6
Colombia	11.4	13.0	12.9	10.8	11.9	12.5
Central America*	10.9	11.5	12.2	12.3	12.7	10.1
Africa	14.6	17.1	17.5	20.4	17.0	17.2
Asia	16.9	16.7	17.3	20.7	21.5	20.3
Other	10.0	10.9	12.1	11.5	11.0	11.2
Total	92.3	97.1	88.7	103.7	97.7	106.8

July-June crop year. Bag = 60 kg. 1998/99 forecast.
*Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.
Source: Foreign Agricultural Service, USDA
Economic Research Service, USDA

The recent earthquake in Colombia apparently did not seriously affect the coffee crop, but some drying sheds were damaged. The industry reportedly avoided serious damage because processing facilities are dispersed throughout the country, so not all were affected.

Initiatives by the governments of a number of coffee-exporting countries reflect the importance of coffee to their economies. In Colombia, improvements to the "coffee highway" connecting primary producing areas have been proposed, although opposition to erecting toll booths to pay for the project has been encountered. In Kenya and Venezuela, governments have announced intentions to encourage coffee plantings following a dropoff in oil export revenues. In Brazil, government loans are supporting harvest wages and good orchard maintenance for growers willing to postpone sales until market prices pick up again. Brazil's loan program shows the government's resolve to support the coffee economy, despite pressure to cut government spending.

For all countries, financing these programs is more difficult when export revenues are dropping, since funding is linked to the very revenues the programs are supposed to help generate. Also, such programs generally increase world supplies of coffee, which leads to lower prices.

Coffee Prices: How Volatile?

Coffee prices are among the most volatile in world commodity trading, historically more volatile than prices for crude oil, gold, sugar, cocoa, corn, and soybeans. However, coffee prices have declined less than prices for other commodities in recent months in the face of devaluing currencies, bountiful supplies, and weak demand. Coffee's major markets, in relatively strong economies of North America and Western Europe, have fared better than markets in Asia and East Europe.

World coffee prices swing as producer- and importer-held stocks rise and fall. Stock levels reflect fluctuations in production driven largely by crop cycles and weather. During the early 1990's, a relatively calm period for the coffee market, producer stocks ranged from 40 million to 50 million bags, around 50 percent of total use. Since 1994/95, producer stocks have trended down toward 25 percent of use, while importers' stocks have declined even more sharply. As a result, price volatility has increased.

The fortunes of coffee exporters depend increasingly on supply management by producers, because importers have become less willing to hold stocks to buffer the price volatility. Traditionally, U.S., European, and Japanese importers could react to increased coffee prices by using up stocks. In recent years, however, U.S. and other importers and roasters have moved toward just-in-time inventory to avoid carrying costs. When supplies tighten in one region because of smaller crops, importers turn to other regions to satisfy roaster demand. Because of low

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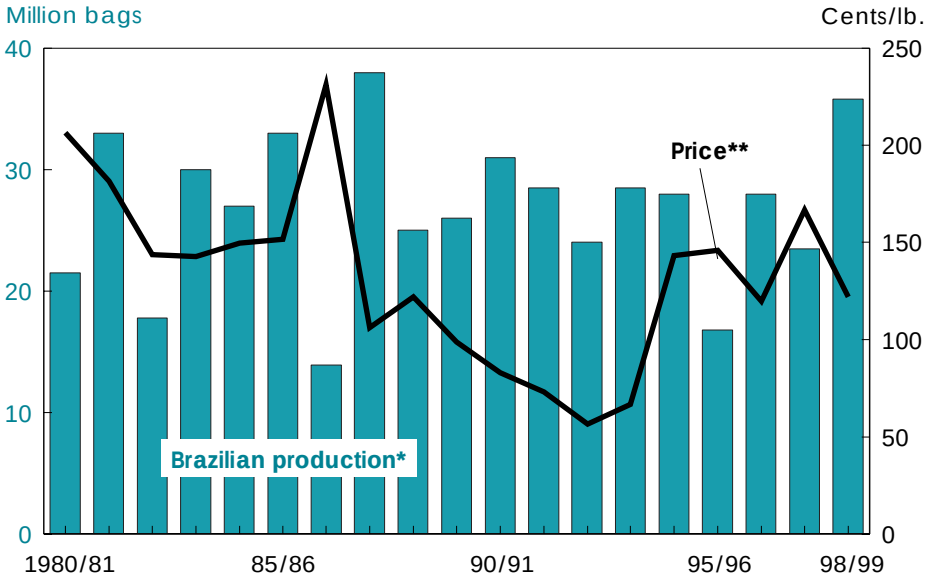
Coffee Production Levels Tend to Alternate



July-June crop year. Bag = 60 kg. 1998/99 forecast.
*All coffee varieties. **New York spot prices for Brazilian arabica coffee.

Economic Research Service, USDA

importer stocks, as world supplies tighten, prices can be expected to increase proportionately more than supplies decrease, and export earnings will increase—at the expense of coffee consumers. The higher costs of green coffee are passed on through higher prices for roasted beans. Conversely, a rebound in coffee production will depress prices and lead to lower export earnings, unless stocks can be held—at exporter expense.

The U.S. is the largest single-country consumer of coffee, importing $3.6 billion of coffee last year. As world prices for green coffee soared to $2 a pound in late 1994, U.S. imports dropped to 15 million bags—the lowest total in the 1990's (*AO* May 1995). U.S. inventories, which had risen to over 10 million bags, were drawn down to 2 million bags, while monthly roastings stayed near 1.5 million bags. By late 1998, green coffee stocks had decreased to nearly 1 million bags as roasters counted on plentiful supplies readily available from South America. In the past few months, U.S. stocks have increased due to attractive prices and talk of a smaller upcoming world supply.

U.S. retail coffee prices follow the prices for imported coffee fairly closely. For example, during July-December 1998 world prices for green coffee averaged $1 a pound—30 cents below a year earlier, and retail prices for roasted coffee averaged $3.62 cents a pound—84 cents below a year earlier. Thus, both markets showed a similar percentage decrease.

Prospects for Brazil's Crop In 1999/2000

Forecasts by private analysts and Brazilian government officials indicate the 1999/2000 coffee crop will be much smaller than USDA's 1998/99 estimate of 35.6 million bags. These forecasts anticipate a drop of about 10 million bags, or 30 percent. Brazilian coffee production can be projected within a range of 5 million bags, taking into account the biennial bearing pattern (expected year-to-year yield fluctuations caused by biological competition between fruiting and branch growth) along with measures of capacity, incentives to maintain yields, and occasional damage from freezes and droughts. However, more precise forecasts are possible only with direct observation of coffee flowering and fruit development.

In the 1990's, Brazil has produced an average of 26 million bags, ranging from 17 million to 36 million. Brazil's off-year crops average 5 million bags less than on-years. The drop can be greater in years of freeze, drought, and/or excessive stress from an above-average on-year crop.

Over the last 100 years, Brazil has experienced 24 moderate-to-severe freezes, which occur mostly in July and August. Severe freezes cause tree damage, as happened in 1994. Devastating freezes have occurred three times in Brazil, most recently in July 1975, reducing the 1976/77 crop to 9.3 million bags from an expected 22 million. A drought can be as damaging as a freeze—for example, drought reduced 1986/87 production to 13 million bags, down 19 million from 1985/86. Drought or freeze during a year following a large crop lowers production in Brazil 16 million bags, on average.

The size of Brazil's coffee crop is affected also by the degree of orchard care, which includes fertilization, pest and disease management, weed control, irrigation, pruning, and tree replacement. Coffee trees, like most tropical and subtropical crops, are highly sensitive to changes in environmental and agronomic conditions. Flowering is triggered by rainfall or irrigation, and fruit development hinges on tree vigor. While orchard care is difficult to measure, world coffee prices affect the willingness and ability of growers to bear the costs. Low prices in 1998/99, however, will not necessarily translate into poor orchard care—the Brazilian government has made grower loans under favorable terms to offset the depressed market.

Factors expected to minimize the off-year production effect in 1999/2000 include full recovery of trees pruned back severely following the 1994 freeze, new plantings and improved cultural practices supported by government assistance, and good weather for flowering and fruit development so far this season. The first official USDA forecast of the 1999/2000 Brazilian crop will be published June 11 on the USDA web site. **AO**

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More USDA information on coffee production by country is available in the Foreign Agricultural Service report *Tropical Products: World Markets and Trade.* See www.fas.usda.gov/htp/tropical/1998/98-12/dec98txt.htm